

USER'S MANUAL
Most Cost-effective Scouting Trail Camera



Contents

1. Introduction	- 1 -
1.1 Fully Functionality Introduction	- 1 -
1.2 Application.....	- 1 -
1.3 Power Supply	- 1 -
1.4 Attention.....	- 2 -
1.5 Key Features	- 2 -
2. Whole View and Details of Camera	- 3 -
2.1 Figure 1: Front View of Camera;	- 3 -
2.2 Figure 3.2: Bottom View of Camera;	- 4 -
2.3 Figure 3.3: Side and Back View of Camera (Basic Model)	- 5 -
2.4 Function Keys & Other Details.....	- 6 -
3. Quick Start	- 7 -
3.1 How to start the camera?.....	- 7 -
3.2 How to set the functions?	- 7 -
4. Operation List	- 8 -
4.1 Video/Photo Playback	- 8 -
4.2 Delete	- 8 -
4.3 Format of SD Card.....	- 8 -
4.4 Auto Power Off	- 8 -
4.4 Operation Menu	- 8 -
5. Specification	- 10 -
6. SD Cards Selection and Battery Life Test Report	- 11 -
6.1 SD Card Selection	- 11 -
6.2 Battery Life Test Report for Reference	- 11 -
7. Trouble Shooting	- 12 -
7.1 Photos Do Not Capture Subject of Interest	- 12 -
7.2 Camera stops taking images or won't take images	- 12 -
8. Warranty	- 13 -

1. Introduction

Thank you for choosing one of our easy operation highly qualified products. You now may enjoy the excellences reflected on this series product. This 12MP HD digital camera was totally R&D by our diligent and smart engineers based on feedbacks and requirements from customers globally. May you also enjoy and adore this product as we do. And our company is always open-minded with willing to adopt creative ideas from you.

1.1 Fully Functionality Introduction

Besides all the functions you may experience from any other similar product; This digital camera is aimed to offer user the most easy to use experience with gradually grow functions added; i.e.: GPRS model, SMS remote control, to configure camera various settings and enable camera to shoot a photo and send back instantly; etc. Follow up with possible upgrade unique features as Wifi.

1.2 Application

This digital camera is an ideal product for housing security, warehouse surveillance, and monitoring wild animals with its camouflage appearance and nice shape. It is convenient to install or fasten, could be used to take photographs manually and carry on long-time videos in Test mode.

- a. Instant surveillance camera for home, office, construction site, and warehouse, etc
- b. Motion-triggered infra-red night vision surveillance;
- c. Animal observation and hunting;

1.3 Power Supply

A. AA Alkaline Batteries

This camera can either work with 4 or 8 AA Alkaline batteries. **Plz note that the voltage of rechargeable AA batteries (1.2V) is insufficient to power this device.** Batteries should be inserted as indicated inside the battery case. Upside down batteries electrode may cause device malfunction. Also, we strongly recommend changing the batteries when power icon on camera screen, or photo stamp is empty.

B. Solar Panel

To bring users better using experience, our engineers designed this camera to be able to work with most standard 6~12V lithium battery build-in solar panels.

C. Power Adaptor—Security Surveillance Purpose

This camera can also be powered by an external 6~12V/ 1~2A DC adaptor. Recommend to remove the alkaline batteries when power adaptor is used, to avoid surcharging. Electrical power is recommended for security purposes.

1.4 Attention

1. Insert the SD memory card correctly, camera does not support SD card hot swap (insertion).
2. Please use AA battery with good quality in order to prevent battery cells from corrosion of leaked acid.
3. Use right adaptor (6~12V/1A or 2A) of this camera to supply power, and do not invert the electrode when put in batteries.
4. In Test mode, camera will automatically power off if no keypad touching within 60 sec. Please manually turn ON it as if you want to do some further configuration.
5. Don't interrupt power supply during system upgrade, please deliver it back to factory if the device doesn't work after upgrading.
6. Do not frequently insert or pull out SD card and battery or plug in and out the adaptor when the camera is on.
7. Do not have any floating objects, such as leaves, strings, or ribbons in the 3M motion detection zone of cameras, to avoid mistaking photograph or videos.
8. Do not keep camera next to hot irrelevant objects, air conditioner exhaust vents, and light, etc. to avoid mistaking photos or videos.

1.5 Key Features

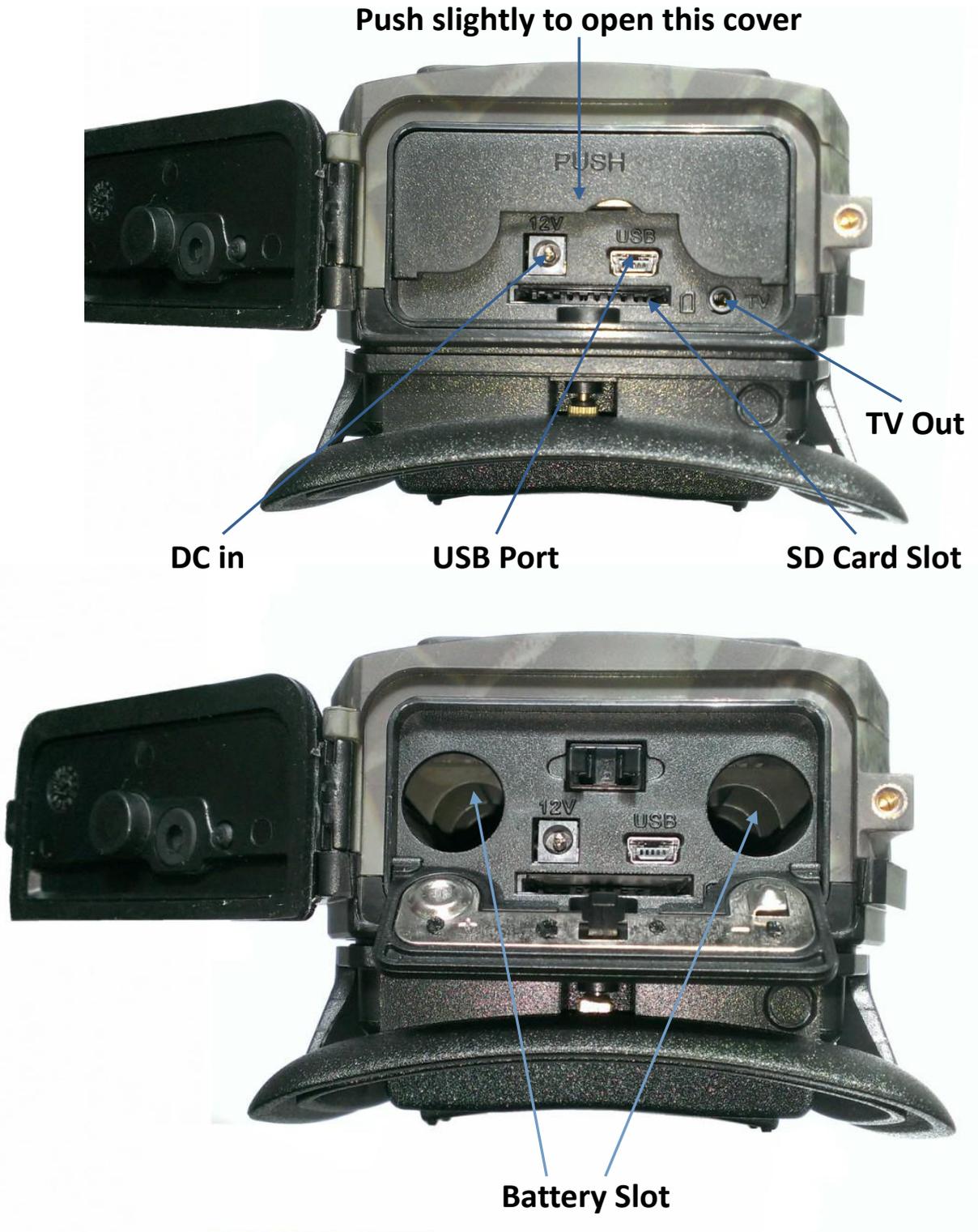
- a. Programmable 5/8/12 Megapixel high-quality resolution;
- b. Especially designed function buttons for user's conveniences;
- c. Optional to turn on/off camera speaker;
- d. 40 pcs IR LEDs for flash range as 20 meters;
- e. Adjustable PIR sensitivity;
- f. Multi-shot pictures (up to 7 pics per trigger);
- g. Impressive quick trigger time: 0.8-1s;
- h. Support standard 6~12V/ 1~2A solar panel;
- i. Color pictures during day; black and white at night.
- j. Adjustable delay between motions;
- k. With 8 AA alkaline batteries, the longest standby time is up to 6 months;
- l. Available operation temperature: -20°C to 60°C;
- m. Time Lapse for automatically and constantly shooting of pictures/videos at preset interval;
- n. With specified Timer, camera can be programmed to work only during preset time period every day;
- o. Stamp of Camera ID, date, time, temperature and moon phase on every picture enables you to identify where and when the camera shot photos;
- p. Built-in 2.0" TFT color screen to review photos and videos in camera.
- q. Audio Recording brings you heart pumping like ever before;
- r. Two different TV OUT settings help you review photos/videos even from Television.

2. Whole View and Details of Camera

2.1 Figure 1: Front View of Camera;



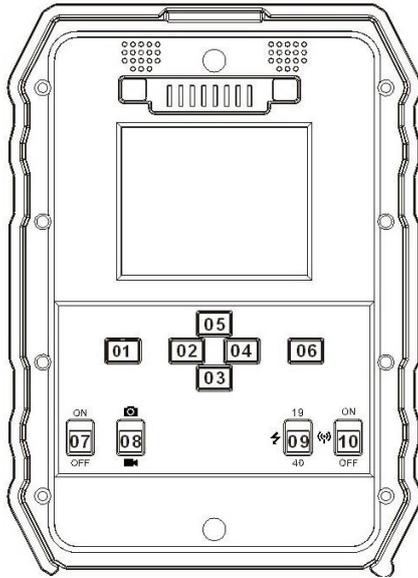
2.2 Figure 3.2: Bottom View of Camera;



2.3 Figure 3.3: Side and Back View of Camera (Basic Model)



Push here to open battery slot cover



Introduction of each button

a) Press Buttons

01: Menu; **02/ 03/ 04/ 05:** navigation arrow buttons; **06:** OK

b) Switch Buttons

07: Power Switch; **08:** Camera/Video Switch; **09:** IR LEDs Group Switch; **10:** GPRS Switch

2.4 Function Keys & Other Details

A. Switch Buttons

Power Switch	<p>Switch up: Power On—PIR intelligent automatically monitoring; light sensor flashes 5 times before entering Mode “Power On”</p> <p>Switch “On”, press “OK” once to wake up camera LCD screen to enter TEST Mode; Press and hold button “OK” for 5 sec to get back to mode “Power On”</p> <p>Note: for GPRS camera, plz switch off camera first when you want to enter test/ programming mode.</p> <p>Switch down: OFF—Camera stops working.</p>
Video/Photo Switch	<p>Switch up: Pic—Photographing</p> <p>Switch down: Video—Video Recording</p>
IR LEDs Group Switch	<p>Switch up: 19—up side 19 pcs IR LEDs work</p> <p>Switch down: 40—all 40 IR LEDs work</p>
GPRS Switch	<p>Switch up: On—GPRS function enabled;</p> <p>Switch down: Off—GPRS function disabled.</p> <p>Note: When user wants to configure camera settings, suggest to disable GPRS function to quick wake up LCD screen.</p>

B. Navigation buttons

a) Power Switch by “On”, press “OK” once to wake up camera LCD screen to enter

TEST Mode;

- b) Test mode, Press “Menu” once to enter camera setting menu; Press “OK” to shoot photo(s) or video clips.
- c) To navigate the interface by pressing “←”, “↑”, “→”, or “↓”, press “OK” for selection. To modify the selection, press “↑” and “↓” again and press “OK” to confirm. To return to the previous menu, press “Menu”.
- d) Press and hold button “OK” for 5 sec to get back to mode “Power On”

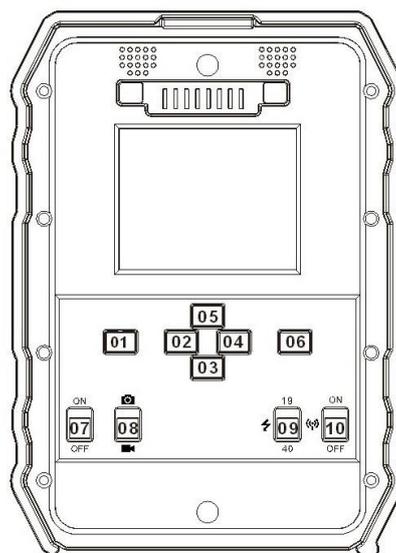
3. Quick Start

3.1 How to start the camera?

Switch button ⑦ to “ON”, press button ⑥ “OK” once to wake up camera LCD screen (to enter TEST Mode.)

3.2 How to set the functions?

- C. Test mode, Press button ① “Menu” once to enter camera setting menu;
- D. To navigate menu interface by pressing “←”, “↑”, “→”, or “↓”, press “OK” for selection. To modify the selection, press “↑” and “↓” again and press “OK” to confirm. To return to the previous menu, press “Menu”.
- E. Exit Menu, then press button ⑥ “OK” for 5 sec to enable camera to work automatically by itself.
- F. Switch button ⑧ to switch “Photographing”/ “Video Recording”;
- G. Switch button ⑨ to turn on 19 IR LEDs or whole 40 IR LEDs.



4. Operation List

4.1 Video/Photo Playback

In **Test** Mode without pressing button “Menu”: press arrow button “↑” to enter Playback; press “←” and “→” for selection, “OK” to play photo/video.

- 1) Press button “↑” again to return.
- 2) Press “Menu” button to initiate Deletion of files, or Format of SD card.

4.2 Delete:

- a. Delete one: delete selected photo/video;
 - b. Delete All.
- press “↑” and “↓” for selection, “OK” to confirm, “menu” return back to previous interface.

4.3 Format of SD Card

- a. No
 - b. Yes: to format SD card via camera.
- press “↑” and “↓” for selection, “OK” to confirm, “menu” return back to previous interface.

4.4 Auto Power Off

Camera will automatically switch to mode “Power ON” (camera auto shooting photos mode) if no keypad touching within 60 sec.

Note: camera stay in “Test” mode if camera is in Menu configuration interface.

4.5 Operation Menu

Test mode, Press “Menu” once to enter camera setting menu; to navigate setting interface by pressing “←”, “↑”, “→”, or “↓”, press “OK” for selection, and “Menu” to return back to previous menu.

Main Menu	Default Setting	Functions Description
1. Camera ID	OFF	Select “ON” to set 4 digits/ alphabets for each camera. Such function can help user to identify photos are from where and which camera.
2. Camera + Video	OFF	Select “ON”, camera shoots photo(s) first, then video upon same trigger event based on Video Length and Multi-shot user configured.
3. Multi-Shot	1P	Optional 1/2/3/4/5/6/7 photos per trigger
4. Image Size	5MP	12MP/8MP/5MP 4000x3000, 3264x2448, 2592x1944
5. Video Size	640	FHD/HD/640/320: 1920 x 1080: 15FPS only/1280x720/640x480/320x160
6. Video Frame	30FPS	30fps/15fps, programmable
7. Digital Zoom	NO	Lens focus room in 2/ 3/ 4 times.

8. Video Length	5 Sec	5-60s video clips
9. PIR Sensitivity	Middle	High/ Middle/ Low; Higher sensitivity is 1) more sensitive to movements by smaller subjects; 2) longer detection distance; 3) easier for sensor to detect difference between body heat and outdoor temperature; 4) easier to trigger camera to record. In high temperature environment, body heat of subjects and environment temperature is hard to tell by camera, suggest set High .
10. Timer	OFF	Select "ON", to set the beginning time and end time (hour/minute); camera will only work during the time user set.
11. Time Lapse	OFF	Select "ON", to set the interval; PIR sensor of camera will be turned off; camera will shoot pics or video clips automatically upon the interval user set. Configurable interval: 5 seconds to 24 hours.
12. Delay	OFF	The pre-set time interval you desire between photo/video recordings upon motion. This option prevents from taking too many photos or videos. Example: Camera will wait 1 minute between photo/video recordings with motion Configurable delay time: 5 seconds to 2 hours.
13. Audio Recording	ON	Select "ON", audio available in video clips.
14. TV Out	N	NTSC/PAL
15. Stamp	ON	To select or cancel imprinting of programmed camera ID, moon phase, temperature, date, and time on photos.
16. Frequency	50Hz	Improper setting may cause camera screen flicker
17. Language	English	English...
18. Time/Date	01/ 01/ 2011 12: 00	Date/Time; Date: "month/ date/ year"; Time: "hour/minute"
19. Camera Sound	ON	Select "OFF" to turn off camera speaker.
20. SD Cycle Recording	OFF	Select "ON", camera will continue to record photos/videos by deleting earliest photos or video clips recorded in SD card.
21. Camera Password	OFF	Select "ON" to enable password protection for your camera; support totally 6 digits/ alphabets long password access.
28. Trigger Logs	OFF	Select "ON" to enable camera to record the trigger time only, instead of shooting photos/Videos to save battery power. How to use? User can check out when and how many times the camera was triggered by moving objects by reading the time points listed in Txt file which is saved in SD card. Allow SMS command message from phone to withdraw this file remotely. Usage: Enable user to know what time period there will be more

		animals/ moving objects. User can by then to set “Timer” (manually or by SMS command message) to enable camera to shoot photos/videos only during that specific time period.
22. Reset	No	Select “Yes” to reset camera back to factory default setting.
23. About	Version: software version	
	IMEI: user is able to know GPRS module IMEI code after searching GPRS signal.	

5. Specification

Image Sensor	5 Mega Pixels Color CMOS
Effective Pixels	2560x1920
Day/Night Mode	Yes
IR arrange	20m
IR Setting	Top: 19 LED, Foot: 21LED
Memory	SD Card (8MB – 32 GB)
Operating keys	10
Lens	F=3.0; FOV=52°; Auto IR-Cut-Remove (at night)
LCD Screen	2” TFT, RGB, 262k
PIR Sensitivity	3 sensitive levels: High / Normal / Low
PIR distance	12m – 15m
PIR Angle	90°
Picture size	5MP/8MP/12MP = 2592x1944/3264x2448/4000x3000
Picture Format	JPEG
Video resolution	1080P (1920x1280): 15FPS, 720P (1280x720), 640x320, 320x160
Video Format	AVI
Video Length	1-60sec. programmable
Shooting Numbers	1-7
Trigger Time	0.8-1s
Trigger Interval	2s-5s
Camera + Video	Yes
Playback Zoom in	2x, 3x, 4x
Device Serial No.	Yes
Time Lapse	Yes
Beep Sound	ON/OFF
SD Card cycle	ON/OFF
Trigger Logs (PIR Log Recording)	Yes (Most adorable feature)
Operation Power	Battery: 6V; DC: 6~12V
Battery Type	8AA
External DC	6~12V
Stand-by Current	0.15mA
Stand-by Time	4~6 months (4xAA~8xAA)
Auto Power Off	auto switch to mode “ON” in 60s without any operations
Power Consumption	150mA (+650mA when whole 40 IR LEDs light up)
Low battery Alert	4.8V (4.8V: alert; 4.6V: power off)

Interface	TV out/USB/SD Card/DC Port
Mounting	Strap; Tripod
Operating Temperature	-20°C to 60°C
Storage temperature	-30 °C to 70°C
Operation Humidity	5%-90%
Waterproof spec	IP54
Dimensions	131.42 x98.72 x77.44mm
Weight	300g
Certification	CE FCC RoHs

6. SD Cards Selection and Battery Life Test Report

6.1 SD Card Selection

Using a memory card is required to operate the camera. When the camera is "ON" and no memory card is used, the screen displays "Pls insert memory card". The SD slot of the camera has a 32 GB memory capacity. Before inserting or removing the memory card, the camera must be turned "OFF". Failing to do so may cause loss of or damage the pictures already recorded from the memory card. When the SD card is full, the viewing screen indicates "Memory Full". The following data shows an approximate quantity of photos which can be recorded by the camera depending on the memory card capacity.

Chart below will show you the approximate capacity of different size SD cards. Pls check to see which size card can fit your needs best.

SD Size Capacity	1GB	2 GB	4 GB	8 GB	16 GB	32 GB
Photo (pictures)						
5MP	705	1373	2823	5517	11141	244962
8 MP	452	882	1813	3544	7157	14241
12 MP	201	392	806	1575	3181	6326
Video (hours)						
720P HD	00:09:27	00:18:32	00:38:15	01:14:53	02:31:20	04:53:40
640x480	00:26:01	00:50:48	01:44:33	03:24:27	06:52:58	13:09:27
320x160	01:14:07	02:24:28	04:57:04	09:40:39	19:32:30	39:15:10

6.2 Battery Life Test Report for Reference

Test Condition: LCD screen off. Mode: "Power On" _PIR intelligent automatically monitoring						
8AA Alkaline Batteries						
Photos shot per day		Working time	Video clips shot per day			Working time
IR LEDs On			IR LEDs On			
5MP	100 photos	51 days	320× 240	10 sec	10 clips	43 days
8MP	100 photos	49 days	640× 480	10 sec	10 clips	42 days
12MP	100 photos	45 days	1280× 720	10 sec	10 clips	40 days

IR LEDs Off			IR LEDs Off			
5MP	100 photos	59 days	320× 240	10 sec	20 clips	119 days
8MP	100 photos	55 days	640× 480	10 sec	20 clips	113 days
12MP	100 photos	51 days	1280× 720	10 sec	20 clips	101 days

7. Trouble Shooting

7.1 Photos Do Not Capture Subject of Interest

1. Check the “Sensor Level” (PIR sensitivity) parameter setting. For warm environmental conditions, set the Sensor Level to “High” and for cold weather use, set the sensor for “Low”.
2. Try to set your camera up in an area where no heat resources are in the camera’s field of view.
3. In some cases, set the camera near water will make the camera take images with no subject in them. Try to aim the camera over ground.
4. Try to set camera on stable and immovable objects, i.e.: large trees.
5. At night, motion detector may detect beyond range of the IR illumination. Reduce distance setting by adjusting sensor sensitivity.
7. Rising sun or sunset can trigger sensor. Camera must be reoriented.
8. If person/animal moves quickly, it may move out of the camera’s field of view before photo is taken. Move camera further back or redirect camera.

7.2 Camera stops taking images or won’t take images

1. Please make sure that the SD card is not full. If the card is full, camera will stop taking images. Or user can turn on Cycle Recording to avoid such problem.
2. Check batteries to make sure that alkaline or lithium AA batteries left power is enough for camera to work.
3. Make sure that the camera power switch is in the “On” position and not in the “Off” or “Test” modes.
4. When GPRS function is on, there will be around 1 minute interval for camera to send out photo before camera shooting the next photo. Turn off the GPRS, camera can shoot photos continuously.
5. Please format the SD card with camera before using or when camera stops taking images.

8. Warranty

With great pride and full confidence in our products, we always keep our words which are given to our customers as specified warranty terms and service below. Based on a strict QC system, we initially offer all our customers [one year long time limited warranty](#), come along with selectable chargeable [renewal policy of warranty as one, two, three, or four years](#).

Our products are warranted against defects in materials and workmanship for a period of one year from the date of original purchase. If a defect exists, we will, at our option and to extent permitted by law will (1) repair the product at no charge using new or refurbished parts; (2) exchange the product with a functionally equivalent product that is new or refurbished. Provided the product is returned freight charge paid.

This warranty excludes damage resulting from abuse, accident, modifications or other causes that are not defects in materials and workmanship, or by someone other than our authorized technicians. This warranty only covers failures due to defects in materials or workmanship under normal usage.

To obtain warranty service, please contact us to determine the nature of problem before return the product under this warranty (with a written description of the problem and print samples) for repairing or exchanging.